

INTERVIEW SUMMARY

The undersigned conducted a telephone interview with Examiner Samuel and Examiner Ricky Ngo (SPE) on February 17, 2010. At that time, the various claim objections, the subject matter of claim 1 and the architecture/arrangement of an exemplary system were considered. The rejection of claim 1 was discussed with specific reference to *Ibanez* and the alleged APA. Agreement was reached with regards to various clarifying amendments.

REMARKS:

I. CLAIM AMENDMENTS

The claims are amended as indicated in the preceding pages. These amendments are expressly not made in response to the claim rejections of the outstanding Office Action, and are merely for purposes of clarity. It is noted that many of the claim amendments are for the purpose of removing abbreviations and replacing them with the full text of the identified term. As another example, claims 43-57 are amended for purposes of clarity to recite a "program storage device." Support for these amendments can be found in the specification at least at page 7, lines 9-17 and original claims 16 and 31. No new matter is added.

II. THE ABSTRACT

The abstract is amended as indicated on page 2 of this document. It is believed that the amendment to the abstract should render the Examiner's objection to the abstract moot. *See p. 2 of the Office Action, item no. 4.*

III. OTHER OBJECTIONS

The Examiner objected to the disclosure arguing that "the priority paragraph is located on page 11." *See p. 2 of the Office Action, item no. 5.* The text referred to by the Examiner, as previously amended, states:

Additional exemplary and non-limiting applications for the teachings of this invention are described in commonly assigned U.S. Patent Application S.N. 10/770,881, filed on even date with this patent application, and entitled "Method and Apparatus Providing Address Management in a Flat Structure Mobile Network", also by Haihong Zheng, Khiem Le, Rene Purnadi and Srinivas Sreemanthula, the disclosure of which is incorporated by reference herein in its

entirety.

This is not a priority claim. A priority claim was not included in the New Application Transmittal Form nor in the Oath/Declaration, both filed concurrently with the instant patent application. The above portion of the specification is simply a reference to another, related patent application. Note that the identified application was filed on even date with the instant patent application. As such, the Examiner's objection to the disclosure is traversed.

The Examiner objected to the abstract arguing that "the computer-readable medium recited in claims 41-57 is not disclosed in the original disclosure." It is noted that the abstract does not include the term "computer-readable medium." Furthermore, the undersigned agent is unaware of any basis for objecting to the abstract for a term that is recited in the claims but not included in the abstract itself. As such, the Examiner's objection to the abstract is traversed.

The Examiner is respectfully requested to reconsider and remove the above-noted objections.

IV. INTERVIEW

A telephone interview was conducted on February 17, 2010. An interview summary is provided on the preceding page. While agreement specifically was not reached concerning the prior art of the outstanding Office Action, agreement was reached concerning various clarifying claim amendments.

V. CLAIM REJECTIONS:

Claims 1-16 and 31-59 are currently pending, with claims 1, 16, 31 and 43 being independent claims. Claims 17-30 were previously canceled without prejudice or disclaimer.

The allowance of claims 16 and 31-59 is noted with appreciation. It is believed that the amendments to these claims should not affect their allowance. It is further noted that claim 58

depends from independent claim 1.

It is noted that the Examiner failed to articulate a rejection for dependent claims 2 and 3.

- (a) The Examiner rejected claims 1, 4 and 12-15 under 35 U.S.C. §103(a) as being unpatentable over *Ibanez et al.* (U.S. Patent Application Publication No. 2003/0026230, referred to herein as "*Ibanez*") in view of admitted prior art (referred to herein as "APA"). *See pp. 3-6 of the Office Action.*
- (b) The Examiner rejected claims 5 and 11 under 35 U.S.C. §103(a) as being unpatentable over *Ibanez* in view of the APA and further in view of *Shitama* (U.S. Patent Application Publication No. 2002/0126642). *See pp. 6-8 of the Office Action.*
- (c) The Examiner rejected claims 6 and 7 under 35 U.S.C. §103(a) as being unpatentable over *Ibanez* in view of the APA and further in view of *Khalil et al.* (U.S. Patent No. 7,342,914, referred to below as "*Khalil*"). *See pp. 8-9 of the Office Action.*
- (d) The Examiner rejected claim 8 under 35 U.S.C. §103(a) as being unpatentable over *Ibanez* in view of the APA and further in view of *Chiou et al.* (U.S. Patent No. 6,473,413, referred to below as "*Chiou*"). *See pp. 9-10 of the Office Action.*
- (e) The Examiner rejected claims 9 and 10 under 35 U.S.C. §103(a) as being unpatentable over *Ibanez* in view of the APA and further in view of *Shitama* and *Chiou*. *See pp. 10-12 of the Office Action.*

These rejections are respectfully disagreed with and are traversed below.

To warrant the §103(a) rejection of the pending claims, in view of all factual information, it must be determined that the claimed invention "as a whole" would have been obvious to one of ordinary skill in the art at the time the invention was made. The conclusion must be reached on

the basis of the facts gleaned from the prior art. *See MPEP §2142.*

"All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988). *See MPEP §§2142, 2143.03.*

As stated in MPEP §706: "The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity."

A. EXEMPLARY EMBODIMENTS OF THE INSTANT APPLICATION

At page 6, line 24-page 7, line 2 of the specification, it is stated:

In one aspect this invention provides a system and a method to manage addresses in a network. The method includes connecting a MR, also referred to herein as a gateway mobile terminal, of a MONET to an access point AP of an AN that includes an AR; making a request to obtain a plurality of link addresses from a link address manager of the AN; allocating individual ones of the plurality of link addresses to individual ones of network nodes of the MONET; and performing a neighbor discovery procedure with the AR to send at least one neighbor advertisement to declare the allocated individual ones of the assigned plurality of link addresses.

Thus, at least some exemplary embodiments of the invention function as follows. A mobile router (MR), also referred to as a gateway mobile terminal, serves as the gateway for a mobile network (MONET) that includes a number of nodes (e.g., mobile nodes, terminal devices). The MR sends a request to a link address manager of an access network (AN). The request is to

obtain a plurality of link addresses. Once the MR receives a response (e.g., a response from the link address manager, a response providing a plurality of link addresses), the MR allocates individual ones of the link addresses to individual ones of the nodes of the MONET. In such a manner, the MR assists in the provisioning and management of link addresses for the nodes of the MONET.

It is briefly noted that none of the cited prior art (*Ibanez*, the APA, *Shitama*, *Khalil*, *Chiou*), considered separately or in combination, discloses or suggests such functionality (e.g., for a gateway mobile terminal). None of the cited prior art discloses or suggests managing information for a plurality of link addresses that are subsequently assigned (e.g., by a gateway mobile terminal) to nodes of a mobile network. Arguments with respect to specific references and specific claim language are presented in further detail below.

B. UNAMENDED CLAIM 1

Unamended claim 1 recited:

A method comprising:

sending a request for information relating to a plurality of link addresses to a link address manager of an access network (AN), where the request is sent by a **gateway mobile terminal of a mobile network (MONET)**;

receiving a response to the request; and

allocating, based on the response, individual ones of assigned link addresses to individual ones of network nodes of the MONET.

Contrary to the Examiner's suggestion, *Ibanez* relates to a single request by a mobile station 52 for a single link-local address. In contrast, unamended claim 1 recited "sending a request for

information relating to a plurality of link addresses" and "allocating, based on the response, individual ones of assigned link addresses." Since *Ibanez* does not disclose or suggest functionality with respect to "a plurality of link addresses," *Ibanez* clearly cannot be seen to anticipate or render obvious elements of claim 1.

In addition, and by extension, the SGSN of *Ibanez* cannot be seen as analogous to "a gateway mobile terminal of a mobile network (MONET)," as recited in claim 1. *Ibanez* does not disclose or suggest that the operations performed by the SGSN may instead be performed by a gateway mobile terminal, and it would be impermissible to assume such functionality without any express disclosure. One of ordinary skill in the art would not assume that functions performed by a SGSN may instead be performed by a mobile terminal. Such an assumption would be at odds with the accepted functionality of a SGSN and its common role within a wireless network.

On page 4 of the Office Action, the Examiner argued that the APA, at page 3, lines 20-28, allegedly discloses "where the request is sent by **a gateway mobile terminal of a mobile network (MONET)**," as recited in claim 1. However, this portion of the Background section (page 3, lines 20-28) discloses that the "prefix scope binding update message" (referred to as a "PS BU" in the specification) is sent by the MR and not by a MNN or a MR. As such, the Examiner's reference to the PS BU as supporting operations performed by a gateway mobile terminal is clearly in error.

The Background section (page 3, lines 12-16) does disclose a MNN sending a binding update (BU) in order to update a binding cache in its home agent (HA) and in correspondent nodes. The Background section does not characterize such a BU as "a request for information" nor would one of ordinary skill in the art understand the BU to correspond to "a request for information." The BU is simply information to update a binding cache in one or more nodes so that messages sent to the CoA of the MNN are properly routed. A BU is not a request for information, but rather provides updated information for other nodes. Thus, mere disclosure in the APA of a MNN sending a binding update cannot be seen to correspond to "a request for information," as recited in claim 1.

Furthermore, neither a PS BU nor a BU could be seen to correspond to "a request for information relating to a plurality of link addresses," as recited in claim 1. In fact, any such alleged correspondence with a BU sent by an individual MNN would appear to be at odds with the purpose of the BU since the BU is intended to update the binding cache in other nodes *for a CoA of that particular MNN* (i.e., a single MNN, not a plurality of MNNs or a plurality of link addresses).

On page 4 of the Office Action, the Examiner cited the APA at page 5, lines 14-18 as allegedly disclosing the allocating step of claim 1. This portion of the Background section states:

However, whether or not there is grouped mobility, the current approaches involve the gateway device (e.g., the MR 3) performing address management for all MNNs 7 within the MONET 1. The AN 4 that the gateway device is connected to may not be aware of the individual MNNs 7, but only the LLA of the gateway device, e.g., only the LLA of the MR 3.

Mere disclosure of a "gateway device (e.g., the MR 3) performing address management for all MNNs 7 within the MONET 1" cannot be seen as disclosing or suggesting "allocating, based on the response, individual ones of assigned link addresses to individual ones of network nodes of the MONET," as recited in claim 1. The Background section does not disclose or suggest any such allocating of assigned link addresses, and any inference of such a disclosure based on the above-quoted portion of the Background, or any other portion of the Background, would be an unreasonable extension. There is no basis for inferring such a step of allocating.

It is further noted that *Ibanez* does not cure the above-noted defects of the APA. Similarly, the APA is not seen to cure the above-noted defects of *Ibanez*.

The features recited in unamended claim 1 are not disclosed or suggested in the cited art. *Ibanez* in view of the APA certainly cannot be seen to render claim 1 obvious. Therefore, claim 1 is

patentable and should be allowed.

C. AMENDED CLAIM 1

Claim 1 is amended herein to recite:

A method comprising:

sending a request for information relating to a plurality of link addresses to a link address manager of an access network, **where the request is sent by a gateway mobile terminal of a mobile network that further comprises at least one mobile network node, where the gateway mobile terminal is coupled between the at least one mobile network node and an access point of the access network;**

receiving, by the gateway mobile terminal, a response to the request **from the link address manager;** and

allocating, based on the response, **individual ones of the plurality of link addresses** to individual ones of the at least one mobile network node of the mobile network, **where the allocating is performed by the gateway mobile terminal.**

It is noted that neither *Ibanez* nor the APA, considered separately or in combination, disclose or suggest the above-emphasized elements of amended claim 1. The features recited in amended claim 1 are not disclosed or suggested in the cited art. *Ibanez* in view of the APA certainly cannot be seen to render claim 1 obvious. Therefore, claim 1 is patentable and should be allowed.

D. CLAIMS 2-15 AND 58

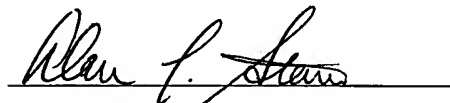
Though dependent claims 2-15 and 58 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 1.

While this Response is deemed to be fully responsive to the objections and rejections in the outstanding Office Action, the Applicants respectfully reserve the right to further argue one or more of the dependent claims when responding to any future actions, such as when responding to further Office Actions or in an Appeal Brief.

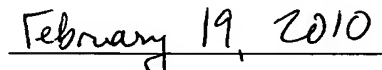
VI. CONCLUSION

The Examiner is respectfully requested to reconsider and remove the rejections of claims 1-15 and to allow all of the pending claims as now presented for examination. For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Should any unresolved issue remain, the Examiner is invited to call Applicants' agent at the telephone number indicated below.

Respectfully submitted:



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